

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) An arithmetic performance attribution method for determining portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , comprising the steps of:

$$(a) \text{ determining coefficients } c_1 = A, \text{ and } c_2 = \left[\frac{R - \bar{R} - A \sum_{jt} a_{jt}}{\sum_{jt} a_{jt}^2} \right],$$

where A has any predetermined value, a_{jt} is a component of active return, the summation over index j is a summation over all components a_{jt} for period t ,

$R = [\prod_{t=1}^T (1 + R_t)] - 1$, $\bar{R} = [\prod_{t=1}^T (1 + \bar{R}_t)] - 1$, R_t is a portfolio return for period t , \bar{R}_t is a benchmark return for period t , and the components a_{jt} for each period t satisfy $\sum_j a_{jt} = R_t - \bar{R}_t$; and

(b) determining the portfolio performance as $R - \bar{R} = \sum_{it} [c_1 a_{it} + c_2 a_{it}^2]$, where the summation over index i is a summation over all the terms $(c_1 a_{it} + c_2 a_{it}^2)$ for period t .

2. (original) The method of claim 1, wherein A is

$$A = \frac{1}{T} \left[\frac{(R - \bar{R})}{(1 + R)^{1/T} - (1 + \bar{R})^{1/T}} \right], \text{ where } R \neq \bar{R},$$

or for the special case $R = \bar{R}$:

$$A = (1 + R)^{(T-1)/T}.$$

3. (original) The method of claim 1, wherein $A = 1$.

4. (original) An arithmetic performance attribution method for determining portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , comprising the steps of:

(a) determining a set of coefficients c_k , including a coefficient c_k for each positive integer k ; and

(b) determining the portfolio performance as $R - \bar{R} = \sum_{it} \sum_{k=1}^{\infty} c_k a_{it}^k$, where a_{it} is a component of active return for period t , the summation over index i is a summation over all components a_{it} for period t , $R = [\prod_{t=1}^T (1 + R_t)] - 1$, $\bar{R} = [\prod_{t=1}^T (1 + \bar{R}_t)] - 1$, R_t is a portfolio return for period t , \bar{R}_t is a benchmark return for period t , and the components a_{it} for each period t satisfy $\sum_i a_{it} = R_t - \bar{R}_t$, where the summation over index i is a summation over all components a_{it} for said each period t .

5. (original) The method of claim 4, wherein A is

$$A = \frac{1}{T} \left[\frac{(R - \bar{R})}{(1 + R)^{1/T} - (1 + \bar{R})^{1/T}} \right], \text{ where } R \neq \bar{R},$$

or for the special case $R = \bar{R}$:

$$A = (1 + R)^{(T-1)/T}.$$

6. (original) The method of claim 4, wherein $c_k = 0$ for each integer k greater

than two, $c_1 = A$, $c_2 = \left[\frac{R - \bar{R} - A \sum_{jt} a_{jt}}{\sum_{jt} a_{jt}^2} \right]$, A has any predetermined value, the

summation over index j is a summation over all components a_{jt} for period t , $R = [\prod_{t=1}^T (1 + R_t)] - 1$, $\bar{R} = [\prod_{t=1}^T (1 + \bar{R}_t)] - 1$, R_t is a portfolio return for period t , \bar{R}_t is a benchmark return for period t , and the components a_{jt} for each period t satisfy $\sum_j a_{jt} = R_t - \bar{R}_t$.

7. (currently amended) A computer system, comprising:

a processor which performs ~~programmed to perform~~ an arithmetic performance attribution computation to determine portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , by determining coefficients $c_1 = A$, and

$$c_2 = \left[\frac{R - \bar{R} - A \sum_{jt} a_{jt}}{\sum_{jt} a_{jt}^2} \right],$$

where A has any predetermined value, a_{jt} is a component of active return, the summation over index j is a summation over all components a_{jt} for period t , R is

$$R = \left[\prod_{t=1}^T (1 + R_t) \right] - 1, \quad \bar{R} = \left[\prod_{t=1}^T (1 + \bar{R}_t) \right] - 1,$$

R_t is a portfolio return for period t , \bar{R}_t is a benchmark return for period t , and the components a_{jt} for each period t satisfy $\sum_j a_{jt} = R_t - \bar{R}_t$, and determining the portfolio

performance as $R - \bar{R} = \sum_{it} [c_1 a_{it} + c_2 a_{it}^2]$, where the summation over index i is a

summation over all the terms $(c_1 a_{it} + c_2 a_{it}^2)$ for period t ; and

a display device coupled to the processor for displaying a result of the arithmetic performance attribution computation.

8. (original) The computer system of claim 7, wherein A is

$$A = \frac{1}{T} \left[\frac{(R - \bar{R})}{(1 + R)^{1/T} - (1 + \bar{R})^{1/T}} \right], \text{ where } R \neq \bar{R},$$

or for the special case $R = \bar{R}$:

$$A = (1 + R)^{(T-1)/T}.$$

9. (currently amended) A computer system, comprising:

a processor which performs ~~programmed to perform~~ an arithmetic performance attribution computation to determine portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , by determining a coefficient c_k for each integer k greater than zero, and determining the portfolio performance as

$R - \bar{R} = \sum_{it} \sum_{k=1}^{\infty} c_k a_{it}^k$, where a_{it} is a component of active return for period t , the

summation over index i is a summation over all components a_{it} for period t ,

$R = [\prod_{t=1}^T (1 + R_t)] - 1$, $\bar{R} = [\prod_{t=1}^T (1 + \bar{R}_t)] - 1$, R_t is a portfolio return for period t , \bar{R}_t is a

benchmark return for period t , and the components a_{it} for each period t

satisfy $\sum_i a_{it} = R_t - \bar{R}_t$, where the summation over index i is a summation over all

components a_{it} for said each period t ; and

a display device coupled to the processor for displaying a result of the arithmetic performance attribution computation.

10. (original) The computer system of claim 9, wherein $c_k = 0$ for each integer k

greater than two, $c_1 = A$, $c_2 = \left[\frac{R - \bar{R} - A \sum_{jt} a_{jt}}{\sum_{jt} a_{jt}^2} \right]$, A has any predetermined value, the

summation over index j is a summation over all components a_{jt} for period t ,

$R = [\prod_{t=1}^T (1 + R_t)] - 1$, $\bar{R} = [\prod_{t=1}^T (1 + \bar{R}_t)] - 1$, R_t is a portfolio return for period t , \bar{R}_t is a

benchmark return for period t , and the components a_{jt} for each period t

satisfy $\sum_j a_{jt} = R_t - \bar{R}_t$.

11. (currently amended) A computer readable medium containing instructions ~~which stores code~~ for programming a processor to perform an arithmetic performance attribution computation to determine portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , by determining coefficients

$c_1 = A$, and $c_2 = \left[\frac{R - \bar{R} - A \sum_{jt} a_{jt}}{\sum_{jt} a_{jt}^2} \right]$, where A has any predetermined value, a_{jt} is a

component of active return, the summation over index j is a summation over all

components a_{jt} for period t , $R = [\prod_{t=1}^T (1 + R_t)] - 1$, $\bar{R} = [\prod_{t=1}^T (1 + \bar{R}_t)] - 1$, R_t is a portfolio

return for period t , \bar{R}_t is a benchmark return for period t , and the components a_{jt} for each period t satisfy $\sum_j a_{jt} = R_t - \bar{R}_t$, and determining the portfolio performance as $R - \bar{R} = \sum_{it} [c_1 a_{it} + c_2 a_{it}^2]$, where the summation over index i is a summation over all the terms $(c_1 a_{it} + c_2 a_{it}^2)$ for period t .

12. (original) The medium of claim 11, wherein A is

$$A = \frac{1}{T} \left[\frac{(R - \bar{R})}{(1 + R)^{1/T} - (1 + \bar{R})^{1/T}} \right], \text{ where } R \neq \bar{R},$$

or for the special case $R = \bar{R}$:

$$A = (1 + R)^{(T-1)/T}.$$

13. (currently amended) A computer readable medium containing instructions ~~which stores code~~ for programming a processor to perform an arithmetic performance attribution computation to determine portfolio performance, relative to a benchmark, over multiple time periods t , where t varies from 1 to T , by determining a coefficient c_k for each integer k greater than zero, and determining the portfolio performance as

$$R - \bar{R} = \sum_{it} \sum_{k=1}^{\infty} c_k a_{it}^k, \text{ where } a_{it} \text{ is a component of active return for period } t, \text{ the}$$

summation over index i is a summation over all components a_{it} for period t ,

$$R = \left[\prod_{t=1}^T (1 + R_t) \right] - 1, \quad \bar{R} = \left[\prod_{t=1}^T (1 + \bar{R}_t) \right] - 1, \quad R_t \text{ is a portfolio return for period } t, \quad \bar{R}_t \text{ is a}$$

benchmark return for period t , and the components a_{it} for each period t

satisfy $\sum_i a_{it} = R_t - \bar{R}_t$, where the summation over index i is a summation over all

components a_{it} for said each period t .

14. (original) The medium of claim 13, wherein $c_k = 0$ for each integer k greater

$$\text{than two, } c_1 = A, \quad c_2 = \left[\frac{R - \bar{R} - A \sum_j a_{jt}}{\sum_j a_{jt}^2} \right], \quad A \text{ has any predetermined value, the}$$

summation over index j is a summation over components a_{jt} for period t ,

$R = [\prod_{t=1}^T (1 + R_t)] - 1$, $\bar{R} = [\prod_{t=1}^T (1 + \bar{R}_t)] - 1$, R_t is a portfolio return for period t , \bar{R}_t is a benchmark return for period t , and the components a_{jt} for each period t satisfy $\sum_j a_{jt} = R_t - \bar{R}_t$ where the summation over index j is a summation over all the components a_{jt} for said each period t .